

ABSTRACT

The present invention involves a method of actuating a deployment of a vehicle airbag during an impact event of a vehicle. The method includes providing a vehicle impact sensor having a plurality of elements, wherein each element is adapted to generate an impact sensor signal having a sensor signal value representing a level of impact. The method further comprising receiving an impact sensor signal from each element during the impact event of the vehicle and summing the sensor signal values of the impact sensor signals to define an aggregate sensor signal value. The method further includes determining a number of impact sensor signals having respective sensor signal values greater than an active element threshold value to define a number of active elements and determining a threshold aggregate sensor signal value based on the number of active elements. The method further includes generating an actuating signal for deploying the airbag, when the aggregate sensor signal value is greater than the threshold aggregate sensor signal value.